REMARKS

In view of the preceding amendments and the comments which follow, and pursuant to 37 C.F.R. § 1.111, amendment and reconsideration of the Official Action of July 30, 2003 is respectfully requested by Applicant.

Summary

Claims 1 – 10 stand rejected. Claims 1 – 5 are amended. No new matter has been introduced as a result of these amendments.

Claims 1 – 10 are pending following entry of the present amendments.

Rejection under 35 U.S.C. § 102

The Examiner has rejected claim 1 – 10 under 35 U.S.C. § 102 (e) as being anticipated by Levin et al. (US Patent 6,154,210). The pending claim 1 is directed to a vehicle-mounted input unit provided with a manual manipulator, position sensors, actuators, and a control section for controlling the actuators. Claim 1 has been amended to further recite that "wherein the control section computes the width of the movable range of the manual manipulator from its current position to an end of its possible motion according to changes in position signals supplied from the position sensors, and controls the output to the actuators according to the computed width of the movable range." Thus, claim 1 configuration enables the manual manipulator to give its operator a feel of resistance varying with the width of the movable range of the manipulator, wherein the feel can be weakened when the movable range of the manual manipulator from its current position to an end of its possible motion is wide or, conversely, it can be emphasized when the movable range is narrow (page 8, lines 22 – 27). Whereas, Levin et al. disclose that the controlling of the output of the actuators is performed according to the position of the manual manipulator or force-related data such as velocity or acceleration, but do not disclose or teach that the controlling is performed according to the width of the

movable range of the manual manipulator. As such, claim 1 is not anticipated by Levin et al.

The pending claim 2 has also been amended to recite "wherein the control section computes the magnitude of the working force applied to the manual manipulator according to changes in position signals supplied from the position sensors, and controls the output to the actuators according to the computed magnitude of the working force." Thus, claim 2 configuration enables the manual manipulator to give its operator a feel of resistance varying with the working force applied thereto, when for instance a powerful operator forcefully operates the manual manipulator, the feel can be strengthened or, conversely, when a relatively powerless operator operates the manual manipulator with a relatively small force, it can be weakened to enable the operator, irrespective of his or her relative power, to feel satisfactory operating convenience (page 9, lines 17 – 24). Whereas, although Levin et al. disclose calculating velocity, acceleration, and/or other force related data, they do not disclose or teach controlling the output to the accelerators according to the magnitude of the working force. As such, claim 2 is not anticipated by Levin et al.

The pending claim 3 has also been amended to recite "wherein the control section computes the level of the operating speed of the manual manipulator according to changes in position signals supplied from the position sensors, and controls the output to the actuators according to the computed level of the operating speed." Thus, claim 3 configuration enables the manual manipulator to give its operator a feel of resistance varying with the operating speed of the manual manipulator, and keep the operating speed of the manual manipulator either constant or variable from one operator to another and thereby enable the operator to feel that he or she is operating the manipulator appropriately, resulting in improved operating convenience of the vehicle-mounted input unit (page 11, lines 10 – 17). Whereas, although Levin et al. disclose calculating velocity, acceleration, and/or other force related data, they do not disclose or teach controlling the output to the accelerators according to the computed level of the operating speed. As such, claim 3 is not anticipated

by Levin et al.

The pending claim 4 has also been amended to recite "wherein the control section computes *the level of the operating acceleration* of the manual manipulator according to changes in position signals supplied from the position sensors, and controls the output to the actuators according to the computed level of the operating acceleration." Thus, claim 2 configuration enables the manual manipulator to give its operator a feel of resistance varying with the working force applied thereto, when for instance a powerful operator forcefully operates the manual manipulator, the feel can be strengthened or, conversely, when a relatively powerless operator operates the manual manipulator with a relatively small force, it can be weakened to enable the operator, irrespective of his or her relative power, to feel satisfactory operating convenience (page 9, lines 17 – 24). Whereas, although Levin et al. disclose calculating velocity, acceleration, and/or other force related data, they do not disclose or teach controlling the output to the accelerators according to the magnitude of the operating acceleration. As such, claim 4 is not anticipated by Levin et al.

The pending claim 5 is directed to a vehicle-mounted input unit provided with a manual manipulator, vehicle-mounted electric devices operated by the manual manipulator, position sensors, actuators, and a control section for controlling the vehicle-mounted electric devices and the actuators. Claim 5 has been amended to recite "wherein the control section computes the width of the movable range of the vehicle-mounted electric device from its current position to an end of its possible motion according to changes in position signals supplied from the position sensors, and controls the output to the actuators according to the computed width of the movable range." Thus, claim 5 configuration enables the manual manipulator to give its operator a feel of resistance varying with the width of the movable range of the vehicle-mounted electric device, wherein the feel can be weakened when the movable range of the vehicle-mounted electric device from its current position to an end of its possible motion is wide or, conversely, it can be emphasized when the movable range is narrow (page 12, lines 5 - 11). Whereas, Levin et al. disclose that the

controlling of the output of the actuators is performed according to the position of the manual manipulator or force-related data such as velocity or acceleration, but do not disclose or teach that the controlling is performed according to the width of the movable range of the vehicle-mounted electric device. As such, claim 5 is not anticipated by Levin et al.

Therefore, Applicant submits that claims 1 – 5 are allowable, and that claims 6 – 10, which depend on claims 1 – 5 respectively, are also allowable. Thus, Applicant earnestly requests that the rejections of claims 1 – 10 under 35 U.S.C. §102(e) be withdrawn.

Conclusion

Applicant submits that this application is now in condition for allowance, and favorable reconsideration of this application in view of the above amendments and remarks is respectfully requested. If, there are additional fees due, Applicant requests that this paper constitutes any necessary petition and authorizes the Commissioner to charge any underpayment, or credit any overpayment, to Deposit Account No. 23-1925.

If the examiner finds that there are any outstanding issues which may be resolved by a telephone interview, the Examiner is invited to contact the undersigned at the below listed number

Respectfully submitted,
Brinks, Hofer, Gilson & Lione

By

Gustavo Siller, Jr.
Registration No.: 32,305

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200